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09/651,792	08/30/2000	Hongbin Ji	Ji 4-1-26	2079

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EXAMINER

NGUYEN, HANH N

ART UNIT PAPER NUMBER

2616

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/651,792

Applicant(s)

JI ET AL.

Examiner

Hanh Nguyen

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 9/15/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8-13, 39-43 and 46-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-13, 39-43 and 46-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: is "said call" on line 12 referred to "call admission" on line 1?. If so, applicant is required to amend the "said call" into "said call admission" for language consistent. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 3, 4, 5, 8, 9, 12, 39, 40, 41, 42, 43, 46, 47, 50 and 52 are rejected under 35 USC 102(e) as being anticipated by Yin et al. (Us pat. 5,982,748).

In claim 1, as explained in the specification, page 5, lines 15-20, booking is used to distinguish among different services classes; and each service class has a booking factor. Yin et al. discloses a method for controlling call admission to communication system ( see abstract and fig.1, a network node such as ATM node controlling admission request to a system) comprising assigning a unique overbooking factor to each of a plurality of service classes, thereby ensuring no two service classes have an identical overbooking factor ( se col.7, lines 18-25 and col.8, table

Art Unit: 2616

4, assigning an allocation factor  $f(i)$  to each service class to determine bandwidth allocation among various service classes, the allocation factor  $f(i)$  changes in response to traffic flow for each service class); determining an effective bandwidth for each class based in part on said assigned overbooking factor (see col.7, lines 25-35; from the allocation factor  $f(i)$  determined, bandwidth  $A(i)$  for a service class  $I$  is determined) and either a cell delay variation for constant bit rate service classes or a cell loss ratio for variable bit rate service classes ( see col.3, table 1, col.3, lines 45 to col.4, line 7; a cell delay variation CDV for constant bit rate class or cell loss ratio CLR for variable bit rate service classes); determining a value of a free bandwidth in said communication system ( determining percentage  $B(i)$  of total bandwidth available to service classes; col.6, lines 40-42) based in part on said determined effective bandwidth for each service class (see col.5, lines 60-66; fig.3, step 60, based on available resource determined for the class of service); and admitting or rejecting said call based on said determined value for said free bandwidth ( see fig.3, steps 60, 62, 64, 66, based on te determined available resources for the service class, the requested connection is either rejected or accepted).

In claim 39, Yin et al. has disclosed most of subject matters in claim 1. Yin et al. further discloses a multiplexer/demultiplexer coupled to a program processor (See fig.1, queue selector 28 coupled to CAC 10).

In claims 2 and 40, Yin et al. discloses determining a maximum bandwidth at a port in the communication system (e.g., determining total available bandwidth  $B(i)$  for each class, see col. 6, lines 36-42, wherein the sum of all  $B(i)$  inherently yields the maximum bandwidth  $B$ ); and subtracting at least a portion of the effective bandwidth (e.g.,  $A(i)$ ) for each class from the maximum bandwidth (e.g., see col. 5, lines 61-66 and step 60 of FIG. 3, wherein determining

Art Unit: 2616

available resources inherently comprises subtracting assigned bandwidth  $A(i)$  from available bandwidth  $B(i)$ .

In claims 3 and 41, Yin teaches dividing the effective bandwidth (e.g.,  $A(i)$ ) for each class by its assigned overbooking factor (e.g.,  $f(i)$ ) to produce a result (e.g.,  $B(i)$ ), see col. 7, lines 25-30 wherein upon  $f(i)$  and  $A(i)$  being known,  $B(i)$  is determined according to the equation  $B(i)=A(i)/f(i)$ ; and subtracting the result from the maximum bandwidth (e.g., the combined results  $B(i)$  yield  $B$ , see Table 2 in col. 4 and Table 4 in col. 8, and thus, each  $B(i)$  inherently reduce the overall maximum bandwidth  $B$  by the amount of  $B(i)$ ).

In claims 4, 5, 42 and 43, Yin teaches admitting the call if the free bandwidth is greater than zero and rejecting the call if the free bandwidth is less than zero (e.g., see col. 5, line 61 - col. 6, line 35 regarding accepting or rejecting the connection based upon adequate resources being available, inherently corresponding to bandwidth, and wherein a value of zero is inherently used for determining admitting/rejecting situations involving full booked classes, see col. 7, lines 36).

In claims 8, 9, 46, 47, Yin et al. discloses variable bit rate classes include a real-time variable bit rate class; non-real time variable bit rate class (see col.3, lines 45-55, table 1).

In claims 10, 11, 48 and 49, Yin also teaches a default overbooking factor of 1 indicates no over-booking (e.g., see col. 7, lines 35-40;  $f(i) = 1$  indicates a service class is fully booked).

In claims 12, 50, since Yin et al. discloses the network node in fig.1 is an ATM node, therefore, the communication system that the ATM node is communicating with must be ATM system ( see col.4, lines 30-35).

In claim 52, Yin teaches a plurality of access terminals may be chained whereby each access terminal performs the controlling call admission method independently of the other (e.g., see col. 5, lines 45-50, procedure shown in fig.3 is executed by one or more than one nodes coupled in the system and each comprising a connection admission controller).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 and 51 are rejected under 35 USC 103(a) as being unpatentable over Yin et al. (US pat. 5,982,748) in view of Huang et al. (US pat. 6,608,815 B1).

In claims 13 and 51, Yin et al. does not disclose the communication system is an IP network. Huang et al. teaches packet-based CAC solution for transmitting either ATM cells or IP service packets (see abstract or col.3, lines 35-40). In IP network, CAC in IP routers determines whether a new connection can be accepted in term of service requirements; then allocates enough bandwidth to guarantee the required QOS for each connection (see col.6, lines 32-45). Therefore, it would have been obvious to one ordinary skilled in the art to perform admission control in IP of Yin et al. since the ATM network being used in Yin et al. and the IP network are packet based networks. The motivation is to manage system bandwidth to guarantee new connections having enough qos requirements.

***Response to Arguments***

Applicant's arguments with respect to claims 1-5, 8-13, 39-43, 46-52 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Thursday from 8:30 to 4:30. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on 571 272 7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen

A handwritten signature in black ink, appearing to read 'HNguyen', with a stylized, cursive script.

**HANH NGUYEN**  
**PRIMARY EXAMINER**